

PROPOSAL 126

5 AAC 85.045(18). Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose hunting seasons in Unit 20D as follows:

Units and Bag Limits (18)	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
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Unit 20(D), that portion lying west of the west bank of the Johnson River and south of the north bank of the Tanana River, except the Delta Junction Management Area and the Bison Range **Controlled Use Area** [YOUTH HUNT MANAGEMENT AREA]

RESIDENT HUNTERS:

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1 antlerless moose by drawing permit only; up to 1,000 permits may be issued in combination with that portion in the Delta Junction Management Area; a person may not take a calf or a cow accompanied by a calf; or

Oct. 10–Nov. 25
(General hunt only)

1 antlerless moose by registration permit only; a person may not take a calf or a cow accompanied by a calf

Oct. 10–Nov. 25
(General hunt only)

...

Unit 20(D), that portion within the Bison Range Controlled Use Area

...

1 bull with spike-fork or 50-inch antlers or antlers with 4 or more brow tines on one side; or 1 antlerless moose, per lifetime of a hunter, by youth hunt drawing permit only; up to 10 permits may be issued; a person may not take a calf or a cow accompanied by a calf;

Sept. 1–Sept. 30
(General hunt only)

Sept. 1–Sept. 30

Unit 20(D), that portion within the Delta Junction Management Area

RESIDENT HUNTERS:

1 moose every four regulatory years by drawing permit only, a person may not take a calf or a cow accompanied by a calf; or

Sept. 1–Sept. 15
(General hunt only)

...

1 antlerless moose by drawing permit only; up to 1,000 permits may be issued in combination with that portion lying west of the west bank of the Johnson River and south of the north bank of the Tanana River; a person may not take a calf or a cow accompanied by a calf; or

Oct. 10–Nov. 25
(General hunt only)

1 antlerless moose by registration permit only; a person may not take a calf or a cow accompanied by a calf

Oct. 10–Nov. 25
(General hunt only)

NONRESIDENT HUNTERS:

1 moose every four regulatory years by drawing permit only, a person may not take a calf or a cow accompanied by a calf; or

Sept. 1–Sept. 15

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What is the issue you would like the board to address and why? Antlerless moose hunts must be reauthorized annually. The objectives of the Unit 20D antlerless moose hunts are to 1) stabilize population growth of this high-density moose population; 2) address concerns about range degradation, reduced nutritional condition of moose, and reduced reproductive success of moose; 3) make progress toward meeting the Unit 20D intensive management (IM) harvest objective of 500–700 moose; and 4) provide youth and disabled veteran hunting opportunity. These objectives are being met.

If antlerless moose hunts are not reauthorized, the moose population could quickly increase to levels beyond the ability of the habitat to support the moose population. Opportunity to hunt a harvestable surplus of cow moose would be lost, and the ability to meet IM harvest objectives could be compromised. Additionally, the population may need to be reduced dramatically when new data are available and analyzed.

Antlerless moose hunts are offered in southwest Unit 20D, which has the highest moose density in the unit. This area has great potential for population growth due to an abundance of high-quality moose habitat created from extensive land clearing for agricultural use and multiple wildfires over the past 30 years. Total moose harvest in all of Unit 20D averaged 225 moose (an average of 201 bulls and 24 antlerless moose) during regulatory years 2020 and 2021. No antlerless moose were harvested in RY22 and no harvest is planned for RY23.

Antlerless hunting opportunity and harvest is limited at present to help maintain this moose population at current densities and within the ability of the habitat to support the population. The largest antlerless harvest (n=113) that occurred in Unit 20D was in 2009, when antlerless hunts were first authorized for the purpose to reduce population size and address moose nutritional concerns. Since 2011, the southwest Unit 20D population estimates (range = 2,500–4,500 moose), and bull harvest in southwestern Unit 20D (201–282) have been stable. The 2022 population estimate for southwest Unit 20D was 2,459 moose (corrected for sightability) with a density of 1.94 moose per square mile, 28 calves:100 cows and 23 bulls:100 cows. The 2022 population estimate is 40% lower than the 2020 estimate, likely due to increased mortality as a result of severe winter conditions during 2021–2022, which included deep snow and winter rain events. The department does expect nutritional indices to improve because of the current reduced population size. However, to maintain this moose population from experiencing nutritional stress in the future, a limited antlerless harvest may still be warranted in future years.

Continued antlerless harvest will likely be needed to maintain this population at the optimal density relative to habitat constraints and will contribute additional harvest towards meeting the IM harvest objective of 500–700 moose without reducing bull-to-cow ratios below management objectives. The current population trend suggest that low, consistent antlerless harvest provided by drawing permit hunts in Unit 20D, in conjunction with other mortality factors (including ceremonial harvest, vehicle collision, accidents, and predation), is appropriate to maintain population stability.

The Department of Fish and Game will continue to evaluate antlerless moose hunts and their effect on moose density and population growth. Future antlerless moose hunts will be implemented as needed based on the evaluation of three indices of density-dependent moose nutritional conditions in relation to changes in moose density: biomass removal of current annual growth on winter browse, proportion of females with twin calves, and late-winter calf weights.

Additional drawing or registration permits will be issued only if more harvest is needed in specific areas to maintain optimal moose densities.